Amendments to the Claims:

Claims 20 and 21 are cancelled and claim 22 is amended as set forth hereinafter.

Listing of Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 to 16 (Cancelled)

17. (Previously Presented) A method for adjusting a lamp unit relative to an illuminating beam path of a microscope devoid of a beam homogenizer in said illuminating beam path, said microscope including: a microscope objective defining a pupil plane; an
5   adjustable lamp unit for supplying the light transmitted along said illuminating beam path and a detector for detecting the light power of the transmitted light, the method comprising the steps of:
        measuring the integral light power downstream of said pupil
10   plane of said objective with said detector;
        beginning from a start position and determining the maximum gradient of the light power in dependence upon a position change of said lamp unit relative to said illumination beam path; and,
        displacing said lamp unit in a direction of the maximum
15   gradient of light power until the light power detected by said detector is a maximum.

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18.   (Previously Presented)   The method of claim 17, wherein the adjustment of said lamp unit takes place using a motor controlled by software.

19.   (Previously Presented)   The method of claim 18, wherein said microscope includes an evaluation computer and motors for moving said lamp unit relative to said illuminating beam path, the method comprising the further step of utilizing said computer to

5   drive said motors for moving said lamp unit until said maximum of said light power is reached.

20.   (Cancelled).

21.   (Cancelled).

22.   (Currently Amended)   ~~The microscope of claim 21,~~ A microscope comprising:

        a specimen table;

        a light unit for supplying a light for illumination along an

5   illuminating beam path devoid of a beam homogenizer;

        motor drives for adjusting said light unit relative to said illuminating beam path;

        a microscope objective defining a pupil plane;

        a detector integrated into said specimen table;

10   an evaluation and control computer connected to said detector and functioning to sequentially drive said motor drives until a maximum of an integral light power is measured with said

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detector;

said microscope defining an optical axis along said beam

15   path;

a collector optic mounted in said illuminating beam path

downstream of said lamp unit;

an additional motor drive for displacing said collector

optic along said optical axis;

20   wherein said evaluation and control computer further

functions to apply a gradient method for locating said maximum of

said light power by carrying out the following steps:

beginning from a start position and determining the

maximum gradient of the light power in dependence upon a

25   position change of at least one of said lamp unit and said

collector optic; and,

displacing at least one of said lamp unit and said

collector optic in a direction of the maximum gradient of the

integral light power.

23. (Previously Presented) A method for adjusting a lamp unit

relative to an illumination beam path of a microscope devoid of a

beam homogenizer in said illumination beam path, said microscope

including: an optic defining a pupil plane in said illuminating

5   beam path; an adjustable lamp unit for supplying the light

transmitted along said illumination beam path and a detector for

detecting the light power of the transmitted light, the method

comprising the steps of:

measuring the integral light power downstream of said pupil

10   plane with said detector;

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beginning from a start position and determining the maximum

gradient of the light power in dependence upon a position change

of said lamp unit relative to said illumination beam path; and,

displacing said lamp unit in a direction of the maximum

15   gradient of light power until the light power detected by said

detector is a maximum.

24.   (Previously Presented) The method of claim 23, wherein the

adjustment of said lamp unit takes place using a motor controlled

by software.

25.   (Previously Presented) The method of claim 24, wherein said

microscope includes an evaluation computer and motors for moving

said lamp unit relative to said illuminating beam path, the

method comprising the further step of utilizing said computer to

5   drive said motors for moving said lamp unit until said maximum of

said light power is reached.

26.   (Previously Presented) A microscope comprising:

a specimen table;

a light unit for supplying a light for illumination along an

illumination beam path devoid of a beam homogenizer;

5   motor drives for adjusting said light unit relative to said

illuminating beam path;

an optic defining a pupil plane in said illumination beam

path;

a partially transmitting mirror mounted in said illumination

10   beam path upstream of said specimen table;

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a detector mounted in a beam path deflected by said

partially transmitting mirror downstream of said pupil plane for

detecting the light power in said illumination beam path;

an evaluation and control computer connected to said

15   detector and functioning to sequentially drive said motor drives

until a maximum of an integral light power is measured with said

detector; and,

said evaluation and control computer further functioning to

apply a gradient method for locating said maximum of said light

20   power by carrying out the following steps:

beginning from a start position and determining the maximum

gradient of the light power in dependence upon a position change

of at least one of said lamp unit and said collector optic; and,

displacing at least one of said lamp unit and said collector

25   optic in a direction of the maximum gradient of the integral

light power.

27.   (Previously Presented)   The microscope of claim 26, wherein

said microscope defines an optical axis along said beam path;

and, said microscope further comprises: a collector optic mounted

in said illuminating beam path downstream of said lamp unit; and,

5   an additional motor drive for displacing said collector optic

along said optical axis.

28.   (Cancelled).

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